

WHAT IS CLAIMED IS:

5 *at A* 1. An optical interference coating for reflecting infrared radiation and transmitting visible light comprising alternating layers of high index of refraction material and low index of refraction material, wherein the total number of said layers is greater than 51.

2. An optical interference coating as in claim 1, wherein the high index of refraction material is tantalum pentoxide and the low index of refraction material is silica.

10 3. An optical interference coating as in claim 1, wherein a ratio of the total thickness of all of the layers of high index of refraction material to the total thickness of all of the layers of low index of refraction material, r , is at least 0.9.

15 4. An optical interference coating as in claim 1, wherein a ratio of the total thickness of all of the layers of high index of refraction material to the total thickness of all of the layers of low index of refraction material, r , is at least 0.95.

20 5. An optical interference coating as in claim 1, wherein a ratio of the total thickness of all of the layers of high index of refraction material to the total thickness of all of the layers of low index of refraction material, r , is at least 1.0.

25 6. An optical interference coating as in claim 1, wherein a ratio of the total thickness of all of the layers of high index of refraction material to the total thickness of all of the layers of low index of refraction material, r , is at least 1.2.

30 7. An optical interference coating as in claim 1,
 wherein the total number of layers is greater than 55.

 8. An optical interference coating as in claim 1,
 wherein the total number of layers is greater than 60.

35 9. An optical interference coating as in claim 1,
 wherein the total number of layers is greater than 70.

 10. An optical interference coating as in claim 1,
 wherein the total number of layers is 78.

 11. An optical interference coating as in claim 1,
 wherein the total number of layers is less than 200.

40 *sub A2* 12. An electric lamp comprising a light transmissive
 envelope containing an electric light source within wherein
 at least a portion of said envelope is coated with an
 optical interference coating for reflecting infrared
 radiation and transmitting visible light radiation, said
45 coating comprising alternating layers of high index of
 refraction material and low index of refraction material,
 wherein the total number of said layers is greater than 51.

50 13. An electric lamp as in claim 12, wherein the high
 index of refraction material is tantalum pentoxide and the
 low index of refraction material is silica.

55 14. An electric lamp as in claim 12, wherein a ratio
 of the total thickness of all of the layers of high index
 of refraction material to the total thickness of all of the
 layers of low index of refraction material, r , is at least
 0.9.

15. An electric lamp as in claim 12, wherein the total number of layers is 78.

16. An electric lamp as in claim 12, wherein the total number of layers is less than 200.

add 43
add 105
add C1